

Amendments to the Claims:

The following listing of claims replaces all prior versions of the claims:

Listing of Claims:

1. (currently amended) A method of navigating a spinal subarchnoid space in a living being, comprising:

percutaneously introducing a guidewire into the spinal subarachnoid space at an entry location, the guidewire being sufficiently flexible to navigate the spinal subarachnoid space;

percutaneously introducing a device over the guidewire and into the spinal subarachnoid space, the device having a first passageway sized to slidably receive, and work with, at least the guidewire, and the guidewire being positioned in the first passageway; and

advancing the device over the guidewire and within the spinal subarachnoid space at least more than 10 centimeters from the entry location.

2. (original) The method of claim 1, further comprising:
removing a portion of the brain of the living being.

3. (original) The method of claim 1, wherein the living being contains cerebrospinal fluid, and further comprising:

flushing at least some cerebrospinal fluid in order to remove blood from that cerebrospinal fluid.

4. (original) The method of claim 1, further comprising:
inducing hypothermia in at least some brain tissue.
5. (original) The method of claim 1, further comprising:
accessing at least one ventricle located within the head with a second device introduced
through the first passageway of the device.
6. (original) The method of claim 5, further comprising:
draining at least one ventricle located within the head.
7. (original) The method of claim 1, wherein the device includes a second passageway sized
to slidably receive, and work with, at least a guidewire.
8. (original) The method of claim 7, further comprising:
introducing an endoscope through the first passageway of the device.
- 9-10. (withdrawn)
11. (original) The method of claim 1, wherein a cross section taken along the device has a
shape that is non-circular.
12. (original) The method of claim 1, further comprising:
altering the temperature of at least some brain tissue using a pumping apparatus.

13. (original) The method of claim 1, further comprising:
delivering medication to an intracranial subarachnoid space.
- 14-16. (withdrawn)
17. (original) The method of claim 1, further comprising:
introducing an apparatus through the first passageway of the device; and
applying electric current, heat, or cryothermal stimulation to a tissue within the living
being using the apparatus.
18. (original) The method of claim 1, further comprising:
introducing a radioactive pellet through the first passageway of the device; and
placing the radioactive pellet within the living being in order to irradiate a tumor.
19. (original) The method of claim 1, further comprising:
introducing a detector through the first passageway of the device; and
placing the detector within the living being.
20. (original) The method of claim 19, further comprising:
monitoring a physiologic or biochemical property using the detector.
21. (original) The method of claim 1, further comprising:

introducing a penetration apparatus through the first passageway of the device, the penetration apparatus including an outer sleeve element and an inner puncture element, the outer sleeve element and the inner puncture element being slidably coupled together; and
puncturing the pia matter using the penetration apparatus.

22. (original) The method of claim 1, further comprising:
creating a lesion in the brain of the living being.
23. (original) The method of claim 1, wherein the advancing is achieved via a robotic device.
24. (original) The method of claim 1, further comprising:
monitoring the position of the device for a period of time using magnetic resonance imaging, fluoroscopy, endoscopy, computed tomography, thermal imaging, sonography, or any combination of these.
25. (original) The method of claim 1, further comprising:
introducing an electrode through the first passageway of the device; and
placing the electrode within the living being.
26. (original) The method of claim 25, wherein the electrode is an electroencephalography electrode and the placing includes placing the electroencephalography electrode proximate brain tissue.

27. (original) The method of claim 1, further comprising:
introducing material through the first passageway of the device; and
placing the material proximate a cranial nerve to assist in treating a neurologic condition.
28. (original) The method of claim 1, further comprising:
introducing genetic material through the first passageway of the device; and
placing the genetic material within the living being to assist in treating a neurologic condition.
- 29-63. (withdrawn)
64. (previously presented) A method of navigating a spinal subarchnoid space in a living being, comprising:
percutaneously introducing a device into the spinal subarachnoid space at an entry location, the device having a first passageway sized to slidably receive, and work with, at least a guidewire;
advancing the device within the spinal subarachnoid space at least more than 10 centimeters from the entry location;
introducing a radioactive pellet through the first passageway of the device; and
placing the radioactive pellet within the living being in order to irradiate a tumor.

65. (previously presented) A method of navigating a spinal subarchnoid space in a living being, comprising:

percutaneously introducing a device into the spinal subarachnoid space at an entry location, the device having a first passageway sized to slidably receive, and work with, at least a guidewire;

advancing the device within the spinal subarachnoid space at least more than 10 centimeters from the entry location;

introducing a penetration apparatus through the first passageway of the device, the penetration apparatus including an outer sleeve element and an inner puncture element, the outer sleeve element and the inner puncture element being slidably coupled together; and

puncturing the pia matter using the penetration apparatus.

66. (previously presented) A method of navigating a spinal subarchnoid space in a living being, comprising:

percutaneously introducing a device into the spinal subarachnoid space at an entry location, the device having a first passageway sized to slidably receive, and work with, at least a guidewire; and

advancing the device within the spinal subarachnoid space at least more than 10 centimeters from the entry location using a robotic device.

67. (previously presented) A method of navigating a spinal subarchnoid space in a living being, comprising:

percutaneously introducing a device into the spinal subarachnoid space at an entry location, the device having a first passageway sized to slidably receive, and work with, at least a guidewire;
advancing the device within the spinal subarachnoid space at least more than 10 centimeters from the entry location;
introducing an electroencephalography electrode through the first passageway of the device; and
placing the electrode proximate brain tissue.

68. (previously presented) A method of navigating a spinal subarchnoid space in a living being, comprising:

percutaneously introducing a device into the spinal subarachnoid space at an entry location, the device having a first passageway sized to slidably receive, and work with, at least a guidewire;
advancing the device within the spinal subarachnoid space at least more than 10 centimeters from the entry location; and
accessing at least one ventricle located within the head with a second device introduced through the first passageway of the device.

69. (previously presented) The method of claim 68, further comprising:
draining at least one ventricle located within the head.